1   WHAT IS CLAIMED IS:

1.   An electronic still camera capable of A/D
conversion of still image signal obtained from an image
pickup device and compression of thus digitized signal,

5   and provided with a memory medium capable of recording
thus compressed signal plural times, comprising:

detection means for detecting the remaining
capacity of the memory medium;

memory means for memorizing the amount of said

10 compressed signal at each phototaking operation;

calculation means for determining the remaining
number of recordable image frames by dividing the
remaining capacity of the memory medium with the amount
of compressed signal corresponding to an image frame;

15 and

display means for displaying the number of
already recorded image frames and said remaining
number of recordable image frames.

20   2.   An electronic still camera according to
claim 1, further comprising:

selection means for selecting either simul-
taneous display of said number of recorded image frames
and said remaining number of recordable image frames,

25 or display of either one thereof, on said display
means.

3. An electronic still camera capable of A/D conversion of still image signal obtained from an image pickup device and compression of thus digitized signal, and provided with a memory medium capable of recording thus compressed signal plural times, comprising:

detection means for detecting the remaining capacity of the memory medium;

memory means for memorizing the amount of said compressed signal at each phototaking operation;

calculation means for determining the remaining number of recordable image frames by dividing the remaining capacity of the memory medium with the amount of compressed signal corresponding to an image frame; and

display switching means for selectively switching either the display of said remaining number of recordable image frames or the display of the remaining capacity of said memory medium.

4. An electronic still camera capable of A/D conversion of still image signal obtained from an image pickup device and compression of thus digitized signal, and provided with a memory medium capable of recording thus compressed signal plural times, comprising:

detection means for detecting the remaining

1   capacity of the memory medium;

     memory means for memorizing the amount of said
compressed signal at each phototaking operation;

     calculation means for determining the remaining
5   number of recordable image frames by dividing the
remaining capacity of the memory medium with the amount
of compressed signal corresponding to an image frame;
and

     display means consisting of a first display
10   part for indicating the number of already recorded
image frames and a second display part of a belt form
positioned surrounding said first display part, and
adapted to indicate the number of already recorded
image frames and the remaining number of recordable
15   image frames by lighting, in said second display part,
only a range corresponding to said remaining number.

     5.   An electronic still camera capable of A/D
conversion of still image signal obtained from an image
20   pickup device and compression of thus digitized signal,
and provided with a memory medium capable of recording
thus compressed signal plural times, comprising:

     detection means for detecting the remaining
capacity of the memory medium;

25   memory means for memorizing the amount of said
compressed signal at each phototaking operation;

     extraction means for extracting the amount of

1   compressed signal of latest image frames of a pre-

determined number from said memory means;

calculation means for calculating the average

data amount in the image frames of said predetermined

5   number, and determining the remaining number

of recordable image frames by dividing the

remaining capacity of the memory medium with said

average data amount or said average data amount

increased by a predetermined proportion; and

10   display means for indicating said remaining

number of recordable image frames.

6.   An electronic still camera capable of A/D

conversion of still image signal obtained from an image

15 pickup device and compression of thus digitized signal,

and provided with a memory medium capable of recording

thus compressed signal plural times, comprising:

detection means for detecting the remaining

capacity of the memory medium;

20   memory means for memorizing the amount of

said compressed signal at each phototaking operation;

extraction means for extracting, from said

memory means, the amount of compressed signal of the

image frames recorded in the memory medium;

25   calculation means for calculating the average

data amount of thus extracted image frames and deter-

mining the remaining number of recordable image frames

by dividing the remaining capacity of the memory medium

1   with said average data amount or said average data

amount increased by a predetermined proportion; and

display means for indicating said remaining

number of recordable image frames.

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7.   An electronic still camera capable of A/D

conversion of still image signal obtained from an

image pickup device and compression of thus digitized

signal, and provided with a memory medium capable of

10   recording thus compressed signal plural times,

comprising:

detection means for detecting the remaining

capacity of the memory medium;

memory means for memorizing the amount of said

15   compressed signal at each phototaking operation;

extraction means for extracting the maximum

data amount of latest compressed signal from said

memory means;

calculation means for determining the remaining

20   number of recordable image frames by dividing the

remaining capacity of the memory medium with said

maximum data amount; and

display means for displaying said remaining

number of recordable image frames.

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8.   An electronic still camera capable of A/D

conversion of still image signal obtained from an image

1   pickup device and compression of the digitized

signal, and provided with a memory medium capable of

recording thus compressed signal plural times, com-

prising:

5   detection means for detecting the remaining

capacity of the memory medium; and

calculation means for determining the remaining

number of recordable image frames by dividing the

remaining capacity of the memory medium with a pre-

10   determined data amount.

9.   An electronic still camera capable of A/D

conversion of still image signal obtained from an

image pickup device and compression of thus digitized

15   signal, and provided with a memory medium capable of

recording thus compressed signal plural times, com-

prising:

detection means for detecting the remaining

capacity of the memory medium;

20   memory means for memorizing the amount of said

compressed signal at each phototaking operation;

calculation means for determining the remaining

number of recordable image frames by dividing the

remaining capacity of the memory medium with the amount

25   of said compressed signal in the latest phototaking

operation; and

display means for indicating said remaining

1 number of recordable image frames.

10.   An electronic still camera capable of A/D
conversion of still image signal obtained from an
5 image pickup device and compression of thus digitized
signal, and provided with a memory medium capable of
recording thus compressed signal plural times, com-
prising:

detection means for detecting the remaining
10 capacity of the memory medium;

memory means for memorizing the amount of said
compressed signal at each phototaking operation;

extraction means for extracting the maximum and
minimum data amounts of compressed signals from said
15 memory means;

calculation means for determining the minimum
and maximum remaining numbers of recordable image
frames by dividing the remaining capacity of the
memory medium respectively with said maximum and
20 minimum data amounts; and

display means for indicating said remaining
number of recordable image frames in the form of a
range defined by said minimum and maximum remaining
numbers.

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11.   An electronic still camera according to
claim 10, wherein said display means is adapted to

1   indicate said range defined by the minimum and maximum

remaining numbers of recordable image frames, with

two integral numbers.

5   12. An electronic still camera according to claim

10, wherien said display means is adapted to indicate

said range defined by the minimum and maximum remaining

numbers of recordable image frames, by lighting a part

of mutually adjacent display parts.

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         13. An electronic still camera capable of A/D

conversion of still image signal obtained from an

image pickup device and compression of thus digitized

signal, and provided with a memory medium capable of

15   recording thus compressed signal plural times, com-

prising:

         detection means for detecting the remaining

capacity of the memory medium;

         memory means for memorizing the amount of

20   said compressed signal at each phototaking operation;

         extraction means for extracting the image

signals of the maximum amount, minimum amount and

approximately average amount from said memory means;

         calculation means for dividing the remaining

25   capacity of the memory medium with said maximum,

minimum and said approximately average amounts,

thereby obtaining the respectively corresponding

remaining numbers of recordable image frames;

selection means for manually selecting one of said compression signals of the maximum, minimum and approximately average amounts; and

display means for displaying thus selected compressed signal of said maximum, minimum or approximately average amount as a still image and also indicating said remaining number of recordable image frames, corresponding to said selected compressed signal.

14. An electronic still camera capable of A/D conversion of still image signal obtained from an image pickup device and compression of thus digitized signal, and provided with a memory medium capable of recording thus compressed signal plural times, comprising:

detection means for detecting the remaining capacity of the memory medium;

memory means for memorizing the amount of said compressed signal at each phototaking operation;

extraction means for extracting the amount of compressed signal of latest image frames of a predetermined number, from said memory means;

calculation means for determining the minimum and maximum remaining numbers of recordable image frames, by calculating the average data amount in said image frames of predetermined number and the standard

1   deviation thereof, and dividing the remaining

capacity of the memory medium with said.average data

amount to which added is said standard deviation

increased by a predetermined proportion, thereby

5   determining the minimum remaining number of recordable

image frames, and also dividing the remaining capacity

of the memory medium with said average data amount

from which subtracted is said standard deviation

increased by a predetermined proportion, thereby

10   determining the maximum remaining number of recordable

image frames; and

display means for indicating at least either

of said minimum and maximum remaining numbers of

recordable image frames.

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15.   An electronic still camera capable of A/D

conversion of still image signal obtained from an

image pickup device and compression of thus digitized

signal, and provided with a memory medium capable of

20   recording thus compressed signal plural times, com-

prising:

detection means for detecting the remaining

capacity of the memory medium;

memory means for memorizing the amount of said

25   compressed signal at each phototaking operation;

start signal input means for manually entering

a start signal for initiating calculation of average;

1   extraction means for extracting, from said

means, the amount of compression signal of the image

frames after the entry of the calculation start signal

by said start signal input means;

5   calculation means for calculating the average

data amount in said image frames and determining the

remaining number of recordable image frames by

dividing the remaining capacity of the memory medium

with said average data amount; and

10   display means for indicating said remaining

number of recordable image frames.

        16. An electronic still camera capable of A/D

conversion of still image signal obtained from an

15   image pickup device and compression of thus digitized

signal, and provided with a memory medium capable of

recording thus compressed signal plural times,

comprising:

        detection means for detecting the remaining

20   capacity of the memory medium;

        memory means for memorizing the amount of said

compressed signal at each phototaking operation;

        start signal input means for manually entering

a start signal for initiating calculation of average;

25   extraction means for extracting, from said

memory means, the amount of compression signal of

the image frames after the entry of the calculation

1 start signal by said start signal input means;

calculation means for determining the minimum and maximum remaining numbers of recordable image frames, by calculating the average data amount in

5 said image frames of predetermined number and the standard deviation thereof, and dividing the remaining capacity of the memory medium with said average data amount to which added is said standard deviation increased by a predetermined proportion,

10 thereby determining the minimum remaining number of recordable image frames, and also dividing the remaining capacity of the memory medium with said average data amount from which subtracted is said standard deviation increased by a predetermined

15 proportion, thereby determining the maximum remaining number of recordable image frames; and

display means for indicating at least either of said minimum and maximum remaining numbers of recordable image frames.

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17. An electronic still camera according to claim 16, wherein said calculation means is adapted to determine the remaining number of recordable image frames by dividing said remaining capacity of the

25 memory medium with a predetermined value, immediately after the manual entry of said calculation start signal and in case the phototaking operation has not

1   taken place.

18. An electronic still camera according to claim 16, wherein said calculation means is adapted

5   to determine the remaining number of recordable image frames by dividing said remaining capacity of the memory medium with an immediately preceding average value, immediately after the manual entry of said calculation start signal and in case the phototaking

10   operation has not taken place.

19. An electronic still camera according to claim 16, wherein a mounting operation of the memory medium constitutes the manual operation, for entering

15   said average calculation start signal, in said start signal input means.

20. An electronic still camera capable of A/D conversion of still image signal obtained from an

20   image pickup device and compression of thus digitized signal, and provided with a memory medium capable of recording thus compressed signal plural times, comprising:

detection means for detecting the remaining

25   capacity of the memory medium;

memory means for memorizing the amount of said compressed signal at each phototaking operation;

1   calculation means for determining the remaining number of recordable image frames by dividing the remaining capacity of the memory medium with a predetermined data amount until a predetermined number of image

5   frames is reached, and, beyond said predetermined number, calculating the average data amount of the image frames recorded in the memory medium and the standard deviation thereof, and determining the minimum remaining number of recordable image frames by dividing

10   the remaining capacity of the memory medium with said average data amount to which added is said standard deviation increased by a predetermined proportion, and the maximum remaining number of recordable image frames by dividing the remaining capacity of the memory medium

15   with said average data amount from which subtracted is said standard deviation increased by a predetermined proportion; and

        display means for indicating said remaining number of recordable image frames, or at least either

20   of said minimum and maximum remaining numbers of recordable image frames.

        21. An electronic still camera according to claim 20, wherein said predetermined frame number is de-

25   termined, based on the remaining capacity of said memory medium detected by said detection means.

1   22.   An electronic still camera according to claim

20, wherein said proportion of increase ·applied on said

standard deviation in said calculation means beyond

said predetermined number of image frames is a positive

5   constant increasing with the number of recorded image

frames.

23.   An electronic still camera capable of A/D

conversion of still image signal obtained from an

10   image pickup device and compression of thus digitized

signal, and provided with a memory medium capable of

recording thus compressed signal plural times, com-

prising:

compression rate selection means for selecting

15   one of plural compression rates with which said

compression of the digitized signal can be conducted;

detection means for detecting the remaining

capacity of the memory medium;

memory means for memorizing the amount of

20   said compressed signal and the compression rate thereof

for each phototaking operation;

extraction means for extracting, from said

memory means, the maximum and minimum amounts of the

compressed signal for each compression rate;

25   calculation means for determining the minimum

and maximum remaining numbers of recordable image

frames for each compression rate, by dividing the

1   remaining capacity of the memory medium with said

maximum data amounts thereby determining the minimum

remaining numbers of recordable image frames for the

resepctive compression rates, and by dividing the

5   remaining capacity of the memory medium with said

minimum data amounts thereby determining the maximum

remaining numbers of recordable image frames for the

respective compression rates; and

        display means for indicating the remaining

10   number of recordable image frames in the form of a

range defined by the minimum and maximum remaining

numbers of recordable image frames for the currently

selected compression rate.

15   24.   An electronic still camera according to claim

23, wherein said compression rate selection means is

adapted to automatically vary the compression rate when

said detection means detects that the remaining

capacity of the memory medium has become equal to or

20   less than a predetermined value, and said display means

is adapted to indicate the remaining number of recordable

image frames with a range based on thus varied com-

pression rate.

25   25.   An electronic still camera capable of A/D

conversion of still image signal obtained from an image

pickup device and compression of thus digitized signal,

1 and provided with a memory medium capable of recording

thus compressed signal plural times, comprising:

compression rate selection means for selecting

one of plural compression rates with which said

5 compression of the digitized signal can be conducted;

detection means for detecting the remaining

capacity of the memory medium;

memory means for memorizing the amount of said

compressed signal and the compression rate thereof for

10 each phototaking operation;

extraction means for extracting, from said

memory means, the maximum and minimum amounts of the

compressed signal for each compression rate;

calculation means for determining the minimum

15 and maximum remaining numbers of recordable image

frames for each compression rate, by dividing the

remaining capacity of the memory medium with said

maximum data amounts thereby determining the minimum

remaining numbers of recordable image frames for the

20 respective compression rates, and by dividing the

remaining capacity of the memory medium with said

minimum data amounts thereby determining the maximum

remaining numbers of recordable image frames for the

respective compression rates; and

25 display means for indicating at least either

of the minimum and maximum remaining numbers of

recordable image frames for the currently selected

1   compression rate.

     26.   An electronic still camera according to claim

25, wherein said compression rate selection means is

5   adapted to automatically vary the compression rate when

said detection means detects that the remaining capacity

of the memory medium has become equal to or less than a

predetermined value, and said display means is adapted

to indicate the remaining number of recordable image

10   frames with a range based on thus varied compression

rate.

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